



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

AUG 10 2010

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

James A. Ginnetti, Vice President
FirstLight Hydro Generating Company
FirstLight Power Resources
One Corporate Center
20 Church Street
Hartford, CT 06103

Subject: EPA Clean Water Act Administrative Order Docket No. 10-016

Dear Mr. Ginnetti :

Thank you for meeting with EPA's Office of Environmental Stewardship's technical and legal staff on Friday, August 6, 2010 regarding the above-referenced administrative order that EPA issued to FirstLight Power Resources on August 3, 2010. At that meeting, FirstLight explained the actions that it has taken and the impediments that it has faced in the removal of solids from the mile-long tailrace tunnel at the Northfield Mountain Hydroelectric Generating facility. During the meeting, FirstLight sought permission to continue its current solids removal process. Using this process, First Light mechanically excavates the sediments and mixes them with river water prior to discharging the mixture to the Connecticut River. Silt curtains have been installed in the river to limit the down stream migration of solids.

FirstLight presented a solids disposal alternative whereby solids at a much higher concentration would be pumped to an upland dewatering basin. The decanted water, if any, from the upland dewatering basin would then be directed to a polishing basin prior to discharge to an existing culvert and ultimately to the Connecticut River. The alternative is depicted on a plan prepared by New England Environmental dated August 5, 2010 and titled: Upland Sediment Dewatering Area Draft.

It is EPA's position that further investigation and implementation of the upland alternative is warranted to comply with the provisions of EPA's administrative order. As requested by First Light at the meeting, the following are EPA's preliminary comments and questions regarding the draft upland alternative

presented at the meeting. Please provide the required documents and responses no later than Friday, August 13, 2010:

- An updated schematic based upon available information illustrating all proposed unit operations and processes, points of coagulant or chemical addition, overflow and discharge locations.
- An estimate of the percent solids composition of the material remaining in the tunnel. It should be possible to quickly take representative grab samples and analyze the samples for solids content. It is recognized that there is significant variation in the composition both vertically through the pile and along the length of the tunnel.
- Information on the pumps proposed to be used to transfer solids from the tunnel to the storage basin. In particular the output rate at various heads and solids concentrations.
- Details on the sizing and construction of the storage basin, including the manner of construction, height of the walls above the existing ground level, and means of assuring that standing water inside the basin will not percolate through and weaken the walls.
- Details on the operation of the storage basin. In particular, how will the solids be distributed within the basin if the solids content is too high for the material to flow freely? How will any standing water be removed from the storage basin and transferred to the polishing basin? If necessary, how will accumulated solids be removed from the storage basin to provide additional capacity? What is the disposal plan for these removed solids?
- Details on operation of the polishing basin. What is the expected overflow rate to the polishing basin? How will flow from the dewatering basin be discharged to the polishing basin to avoid short circuiting? How will clarified supernatant be removed from the system? What is the expected overflow rate to the polishing basin? Where will the clarified supernatant be discharged? How will accumulated solids be removed from the system? If the addition of polymers or other treatment chemicals is necessary, describe how will these chemicals be selected? How will they be added to the system? What impact will chemical addition have on the use or disposal of the accumulated solids?
- The plan for restoring the storage and polishing basin areas upon completion of the removal of solids from the tailrace tunnel system.

Nothing in this letter may be construed to modify or supersede Administrative Order Docket #10-016. If you have any questions concerning the technical terms of this letter or the Administrative Order, please contact George Harding (617) 918-1870 or Michael Fedak (617) 918-1766 of the Water Technical Unit, or have

your attorney contact Michael Wagner, EPA's legal counsel in this matter, at (617) 918-1735.

Sincerely,

A handwritten signature in black ink that reads "Denny Dart". The signature is written in a cursive, flowing style.

Denny Dart, Manager
Water Technical Unit
Office of Environmental Stewardship

cc: John Howard (FirstLight)
Mark Sussman (Murtha Cullina)
Mickey Marcus (NEE, Inc.)